IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF TEXAS DALLAS DIVISION

MULTIQUIP INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No. 3:22-cv-02599-M
	§	
ANA, INC.,	§	
	§	
Defendant.	§	
	§	

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

This Order addresses the claim construction disputes presented by Plaintiff Multiquip Inc. ("Multiquip") and Defendant ANA, Inc. ("ANA") as to U.S. Patent No. 8,816,651 (the "'651 patent"). On October 23, 2023, the Court held a claim construction hearing. Having considered the arguments and evidence presented by the parties at the claim construction hearing, the Court issues this Order addressing claim construction disputes as to the '651 patent.

I. BACKGROUND

Multiquip asserts that ANA infringes certain claims of the '651 patent. First. Am. Compl. (ECF No. 29) ¶ 53. ANA asserts counterclaims seeking a declaratory judgment of non-infringement and invalidity of the '651 patent. Answer to First Am. Compl. and Amended Counterclaims (ECF No. 30) ¶¶ 145–53.

The '651 patent recites an "Engine-generator with load bank and control system." The specification explains that electric generators often operate under variable demand, *i.e.*, load, conditions. *See generally* '651 patent at 1:11–2:18. Light-load conditions can create problems such as unburned fuel and, in turn, the increased formation of carbon deposits and tar—referred

to as "wet stacking"—and soot that can affect engine operability. It was known in the prior art that wet stacking could be mitigated by connecting the generator to a "dummy" load, consisting of banks of resistors that may be switched in steps, in parallel to the actual load, such that the engine always experiences a minimum demand. In addition, prior art engines are often equipped with "regeneration" features to burn-off soot that can accumulate on particulate filters, which operate more efficiently under high-load conditions.

The '651 patent explains that prior art dummy load systems tend to be wasteful by requiring a set amount of fuel to be burned at all times, resulting in more consumption of fuel than is perhaps necessary. In addition, prior art load banks have not previously been employed to assist with regeneration. The '651 patent purports to address these problems in the prior art by disclosing "a load bank that provides a dummy load to an electric generator, which allows an engine-generator unit to more efficiently operate by decreasing the frequency of regeneration cycles an engine must initiate, and, when regeneration occurs, ensures a minimum generator load to raise exhaust temperatures and thus increase regeneration efficiency." *Id.* at 2:22–28.

Claim 1 of the '651 patent recites:

An engine-generator and load bank system comprising:

an engine mechanically connected to and capable of driving an alternator;

said engine having an engine control module and a particulate filter;

said alternator in <u>electrical communication</u> with an output bus and a load bank bus;

at least one load monitoring device in <u>electrical communication</u> with said output and load bank buses;

<u>a generator controller comprising a load dump output and a load enable output</u>, said generator controller in <u>electrical communication</u> with said engine control module;

a load bank controller comprising a load enable input, a load dump input, a load sensor, and at least one load step output;

said load dump output in <u>electrical communication</u> with said load dump input;

said load enable output in <u>electrical communication</u> with said load enable input;

said load monitoring device in <u>electrical communication</u> with said load sensor;

at least one load step contactor in <u>electrical communication</u> with said at least one load step output; and

at least one <u>load step resistor</u> in <u>electrical communication</u> with said load bank bus by way of said at least one load step contactor;

wherein said generator controller provides a control signal via said load enable output in at least one of the following cases: <u>neglect</u> and <u>regeneration</u>; and

wherein said generator controller provides a control signal via said load dump output in case of a load spike.

Id. cl. 1 (emphasis added).

Claim 19 of the '651 patent recites:

An engine-generator and load bank system comprising:

an engine mechanically connected to and capable of driving an alternator;

said engine having an engine control module and a particulate filter;

said alternator in <u>electrical communication</u> with an output bus and a load bank bus;

a generator controller in <u>electrical communication</u> with said engine control module, said generator controller having at least one load step output;

at least one load step contactor in <u>electrical communication</u> with said at least one load step output; and

at least one <u>load step resistor</u> in <u>electrical communication</u> with said load bank bus by way of said at least one load step contactor;

wherein said generator controller is capable of operating said load step contactor to connect said <u>load step resistor</u> in at least one of the following cases: neglect and regeneration; and

wherein said generator controller is capable of operating said load step contactor to disconnect said <u>load step resistor</u> in case of a load spike.

Id. cl. 19 (emphasis added).

II. LEGAL STANDARD

A. General Principles of Claim Construction

The construction of disputed claims is a question of law for the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 971–72 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). "Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (citation omitted). Accordingly, a proper construction "stays true to the claim language and most naturally aligns with the patent's description of the invention." *Id.* (citation omitted).

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Courts first "look to the words of the claims themselves . . . to define the scope of the patented invention." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citation omitted). The claim terms are "generally given their ordinary and customary meaning," but "a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history." *Id.* (citation omitted). The "ordinary and customary meaning" of the terms in a claim is "the meaning that the term[s] would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1313.

When the meaning of a term to a person of ordinary skill in the art is not apparent, a court is required to consult other sources, including "the words of the claims themselves, the remainder of the specification, the prosecution history, extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* (citation omitted). A court must consider the context in which the term is used in an asserted claim or related claims in the patent, being mindful that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* The specification is "always highly relevant to the claim construction analysis" and is "the single best guide to the meaning of a disputed term." *Id.* at 1315 (quoting *Vitronics*, 90 F.3d at 1582). For example, should the specification reveal that a claim term has been given a special definition by the patentee that is different from the ordinary meaning of the term, the inventor's lexicography is controlling. *Id.* at 1316. Furthermore, if the specification reveals an intentional disclaimer or disavowal of claim scope by the patentee, the claim scope dictated by the specification is controlling. *Id.*

Finally, in construing claims, a court may consult extrinsic evidence, including "expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317 (citing *Markman*, 52 F.3d at 980). Technical dictionaries may assist a court in "better understand[ing] the underlying technology' and the way in which one of skill in the art might use the claim terms." *Id.* at 1318 (quoting *Vitronics*, 90 F.3d at 1584 n.6). Expert testimony may also be helpful to "provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id.* (citation omitted).

Although extrinsic evidence may "shed useful light on the relevant art," it is considered "less significant than the intrinsic record." *Id.* at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). More simply, "extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319. Accordingly, "a court should discount any expert testimony 'that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent." *Id.* at 1318 (quoting *Key Pharms. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998)).

B. Indefiniteness

Title 35, § 112(b) of the United States Code requires that a patent specification shall "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention." The Supreme Court has held this definiteness provision "to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). "The claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014). If a claim does not satisfy these requirements, it is invalid as indefinite under § 112. *Nautilus*, 572 U.S. at 901.

III. AGREED CONSTRUCTION

The parties have agreed to the following construction to apply to the '651 patent, as set forth in the Joint Claim Construction Chart. ECF No. 44.

Term	Agreed Construction
"regeneration"	a process in which an engine doses a particulate filter with
• '651 patent, claims 1, 19	diesel fuel then ignites the diesel fuel to burn off
	accumulated soot

IV. CONSTRUCTION OF DISPUTED TERMS

The parties dispute the construction of six terms in the '651 patent. The Court will address each in turn.

A. "particulate filter"

Disputed Term	Multiquip's	ANA's Proposed	The Court's
	Proposed	Construction	Construction
	Construction		
"particulate filter"	component used to	A filter located in	component used to
• '651 patent, claims 1, 19	reduce particles or	the exhaust system	reduce particles or
	particulate matter	that captures soot	particulate matter
	from the exhaust	from the engine	from the exhaust
	stream of an	exhaust, to be	stream of an
	engine	burned off via	engine
		regeneration	

ANA contends that "particulate filter" is a term known in the industry, and refers to a specific operation for removing a specific category of contaminants, namely by physically capturing and holding soot particulates using a porous material, and subjecting it to regeneration to burn off the soot. In response, Multiquip contends that ANA seeks to limit "particulate filter" to refer to only a sub-class of particulate filters, namely diesel engine particulate filters, contrary to the doctrine of claim differentiation and the specification, which contains no such limitation. In addition, Multiquip contends that ANA's proposed construction misreads the claim language by requiring that regeneration occur in every embodiment of the claimed invention, so as to limit the meaning of "particulate filter" to regenerative filters.

The Court agrees with Multiquip that ANA's proposed construction narrows the meaning of "particulate filter" to the specific case of a particulate filter in a diesel engine—*i.e.*, that the

filter "captures" soot, which is subsequently burned off through regeneration—when the claims contain no such limitations.

Regarding the intrinsic evidence, claims 1 and 19 of the '651 patent each recite an engine-generator and a load bank system comprising, in part, an engine mechanically connected to and capable of driving an alternator, wherein said engine has a particulate filter. *See* '651 patent, cls. 1, 19. The claims both further recite that the system contains a "generator controller," which either provides a control signal (claim 1) or is capable of operating a load step contactor (claim 19) "in at least one" of two cases: neglect and regeneration. Pursuant to their agreed construction, the parties agree that in the case of regeneration, "an engine doses a particulate filter with diesel fuel then ignites the diesel fuel to burn off accumulated soot." The claims contain no such limitation on particulate filters in the case of neglect. *See*

In addition, certain dependent claims descending from claim 1 or claim 19 add additional limitations specifying that the engine in the claimed system is a diesel engine. *See* '651 patent, cls. 8, 9, 26, 27; *see also* cls. 9, 27 (specifying that the claimed engine is a "Tier IV Interim or newer diesel engine"). Thus, pursuant to the doctrine of claim differentiation, the engines recited in claims 1 and 19 are not necessarily limited to diesel engines, otherwise the additional limitations in the relevant dependent claims would be superfluous. Put differently, the claims contemplate particulate filters in both diesel and non-diesel engines; in the case of regeneration, the particular filter is dosed with diesel fuel and then ignited to burn off accumulated soot.

The specification provides additional detail on particulate filters used in diesel engines. In discussing the prior art, the specification states that "[m]odern diesel engines, including so-called Tier IV Interim or newer diesel engines, are equipped with particulate filters that serve to capture and remove soot from engine exhaust." *Id.* at 1:33–39. The specification explains that

"[t]he problem is that these particulate filters, which are also called diesel engine particulate filters or DPF, tend to clog with the particulate that they filter." *Id*.

The intrinsic evidence thus clearly contemplates that particulate filters in diesel engines, or DPFs, can capture and remove soot from engine exhaust, and that in the case of regeneration, soot is burned off from particulate filters. However, the Court discerns no directive in the claim language nor the specification mandating that such limitations apply to all particulate filters, including those not in diesel engines or not subject to regeneration.

ANA's extrinsic evidence does not compel a different result. ANA points to the declaration of its expert, Mr. Straub, as evidence that "particulate filter" has a known industry use, namely "as designating a particulate filter in the exhaust system that is subjected to regeneration." ECF No. 36-2 (Straub Dec.) ¶ 59. Mr. Straub contrasts DPFs from other "[d]iesel exhaust aftertreatment" devices he claims are not "particulate filters," namely, oxidation catalyst devices ("DOC") and the selective catalytic reduction system ("SCR"). *Id.* ¶¶ 27–36. However, as discussed, the '651 patent contemplates the existence of particulate filters besides DPFs and in non-diesel systems, and thus Mr. Straub's commentary on DPFs is not determinative of the meaning of "particulate filter" generally. In addition, Multiquip points to other references characterizing DOC, SCR, and DPF devices as "filters" used to reduce or capture particulars. *See, e.g.*, ECF No. 40-1 at 2. Thus, the Court concludes that the extrinsic evidence does not establish a consistent, industry-wide meaning of "particulate filter" as solely relating to DPFs subject to regeneration.

For the foregoing reasons, the Court adopts Multiquip's proposed construction, and construes "particulate filter" to mean "component used to reduce particles or particulate matter from the exhaust stream of an engine."

B. "electrical communication"

Disputed Term	Multiquip's	ANA's Proposed	The Court's
	Proposed	Construction	Construction
	Construction		
"electrical communication"	a direct or indirect	Configured to	a direct or indirect
• '651 patent, claims 1, 19	electrical	allow electrical	electrical
	connection	signals to be sent	connection
		there between.	

Claims 1 and 19 of the '651 patent recite various components of the claimed system being in "electrical communication" with one another. *See, e.g.*, '651 patent, cl. 1 ("said alternator in electrical communication with an output bus and a load bank bus"). The parties present two related disputes associated with this term. First, Multiquip contends the construction must clarify that the connection between the two components in electrical communication may be direct or indirect. For support, Multiquip points to disclosures in the specification showing components in direct electrical contact, *i.e.*, connected via circuit breakers or fused switches, and also indirect electrical contact, namely via transformers. *See* ECF No. 33 at 10–11 (citing '651 patent, at fig.1A, 4:54–56, 5:1–7). Second, ANA contends that the term "electrical communication" requires that the signal passed between the components be the "same" signal, such that "[r]egardless of whether that signal passes through a contactor/switch or other device, it is the same signal generated by the first device that is received by the last device in order to be in electrical communication." ECF No. 36 at 26–27.

As an initial matter, the Court notes that both the claims and the specification of the '651 patent consistently uses the phrase "*in* electrical communication" when describing various components in the system; thus, "electrical communication" refers not to a singular communication or message, but rather to a state or condition, *i.e.*, a state of being able to communicate electrically.

The specification describes various embodiments indicating that "electrical communication" should be construed broadly. For instance, the specification describes one embodiment with a "load monitoring device," which is in electrical communication with an output bus and load bank bus; the load monitoring device is described as being "any piece or combination of electrical metering equipment suitable for gathering and communicating data about system voltage, current, and/or power," and in a preferred embodiment, comprises current transformers. '651 patent, at 5:1–7. This broad description of the load monitoring device— "any" electrical metering equipment suitable for "gathering and communicating data about system voltage, current, and/or power"—suggests the patentee intended that components could be "in electrical communication" in a variety of different ways, including by fused switches (id. at 4:54–56), a load step contactor (id. at 5:25–27), direct physical connection (see, e.g., id. at 5:43–46), or indirectly, via current transformers, as in the embodiment described above involving the load monitoring device (id. at 5:1–7). There is no indication that only one particular type of electrical connection or physical structure is required for components to be in "electrical communication." Thus, the specification supports Multiquip's proposed construction that recognizes that communication can be both direct and indirect.

The Court finds ANA's position regarding the "same" signal being communicated difficult to square with the disclosures in the '651 patent. ANA argues that it would be improper to construe "electrical communication" to permit indirect communication, as that would suggest that the signals being communicated would not be the "same," but there appears to be no such limitation in the '651 patent. In addition, it is unclear what ANA means when it refers to communicated signals being the "same," or even that its proposed construction incorporates such a limitation. ANA argues that "if a first device generates a signal 'A' that is sent to a middle

device to instruct the middle device to generate a signal 'B,' which signal 'B' is then sent by the middle device to the final device, the signal 'B' received by the final device is not the signal 'A' communicated by the first device." ECF No. 36 at 27.

As discussed, the claims use "electrical communication" to describe a state of being able to communicate, and make no commentary on the character or substance of what is being communicated. Put differently, beyond the requirement that components be capable of communicating with one another—*i.e.*, sending and receiving electrical communications—the '651 patent does not appear to require that the electrical communications themselves be preserved or unaltered in the process of being communicated. Indeed, the plain understanding of being "in communication" with the sending and receiving of messages, regardless of whether the message is subsequently voiced, committed to paper, translated to another language, or otherwise transformed on its way to the recipient. Had the patentee wished to limit "electrical communication" in the way ANA urges, it could have provided guidance to that effect in the specification.

For the forgoing reasons, the Court adopts Multiquip's construction, and construes "electrical communication" to mean "a direct or indirect electrical connection."

C. "a generator controller comprising a load dump output and a load enable output"

Disputed Term	Multiquip's	ANA's Proposed Construction	The Court's
	Proposed		Construction
	Construction		
"a generator controller comprising a load dump output and a load enable output" • '651 patent, claim 1	No construction necessary	An electronic controller of the generator that includes two separate output connections, one a load dump output through which a signal is sent to the load bank controller to cause the load bank to disconnect from the generator, and the other a load enable output through which a signal is sent to the load bank controller to connect the load bank to the generator, either entirely or in stages	Plain and ordinary meaning

Multiquip argues that no construction of this term is necessary, and that ANA's proposed construction improperly incorporates additional limitations from the specification, without providing further clarification as to the meaning of the claim language. ANA contends that, absent a construction of this term, Multiquip will be able to argue that the claimed outputs are "only combined signals from a single connector location on a generator controller to a load bank controller." ECF No. 36 at 29. Instead, ANA contends that the claim language and specification indicate that claimed outputs in this limitation are two separate output locations on the generator controller, associated with two input locations on the load bank controller.

The issue in dispute is whether, in the generator controller claimed in claim 1, the "load dump output" and "load enable output" must necessarily consist of two separate structures, or "output connections," as proposed by ANA. The Court concludes that such a construction is not required by either the claims language or the specification, and to conclude otherwise would be to incorporate limitations from the specification into the claim language. The claim language

merely requires that the generator controller comprises two outputs, but provides no restriction on physical structure or any requirement that the outputs not be part of a combined signal.

ANA points to disclosures in the specification, and in particular to Figure 1A, as support for its proposed construction. Specifically, in describing Figure 1A, the specification explains that "[t]he generator controller **26** has a load dump output **28** and a loan enable output **30**." '651 patent, at 5:16–17. Figure 1A, in turn, displays the generator controller 26 with two vertical lines connecting it to load bank controller 32, one of which is labeled load enable output 30. *Id*. fig.1A.

However, the specification does not purport to limit the claimed invention solely to the embodiment depicted in Figure 1A, and accordingly, a narrowing construction is not appropriate. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) ("It is likewise not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words."); *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) ("Absent a clear disavowal in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language.").

The Court notes that ANA's proposed construction simply repeats language from the disputed claim term—namely, "load dump output" and "load enable output"—and thus does not purport to give additional clarification for the jury as to the meaning or scope of the claim term. Moreover, the Court does not construe terms in anticipation of possible infringement arguments, but rather construes terms in light of the claim language, specification, and relevant extrinsic evidence. As a result, the Court declines to adopt ANA's proposed construction, and instead

construes "a generator controller comprising a load dump output and a load enable output" to have its plain and ordinary meaning.

D. "a load bank controller comprising a load enable input, a load dump input, a load sensor"

Disputed Term	Multiquip's	ANA's Proposed Construction	The Court's
	Proposed		Construction
	Construction		
"a load bank controller comprising a load enable input, a load dump input, a load sensor" • '651 patent, claim 1	No construction necessary	An electronic controller of the load bank that has a load sensor and two separate input connections for receiving signals from the separate generator controller, one connection receives a signal that at least part of the load bank is to be connected to the generator and the other connection receives a signal that the entire load bank is to be disconnected from the generator all at once.	Plain and ordinary meaning

ANA contends that construction of this term is necessary to clarify that the "load enable" and "load dump" inputs in the load bank controller consist of two separate structures. As with the prior term, the Court finds that ANA's proposed construction improperly imports limitations from the specification into the claim language. In addition, the Court finds that ANA's proposed construction introduces ambiguity and limitations not found in the claims or the specification, namely by requiring that the load dump input receives a signal "that the entire load bank is to be disconnected from the generator **all at once**." In embodiments containing a load dump, the specification describes that the claimed invention "is operable to entirely disconnect, or 'dump,' the load bank from the generator **within a specified time**," as necessary when the real load of the generator rapidly increases. '651 patent, at 2:37–40 (emphasis added). There appears no support for the "all at once" language in ANA's proposed construction, nor any indication what such

language means. For these reasons, the Court concludes that construction of this term is not necessary, and therefore construes "a load bank controller comprising a load enable input, a load dump input, a load sensor" to have its plain and ordinary meaning.

E. "load step resistor"

Disputed Term	Multiquip's	ANA's Proposed	The Court's
	Proposed	Construction	Construction
	Construction		
"load step resistor" • '651 patent, claims 1, 3– 4, 10–11, 13–14, 19, 22, 28–29, 31–32, 34–36	One of a group of electrical resistors in a load bank that can add or subtract load in an electric circuit	A component that adds a step of resistance in a circuit.	One of a group of electrical resistors in a load bank that can add or subtract a load step in an electric circuit

During the claim construction hearing, it emerged that the primary issue raised in this dispute is the requirement that the load step resistor must add or subtract load in an electric circuit by "steps"—that is, set incremental amounts—as opposed to variable adjustments. The parties agreed that the inclusion of such a limitation in Multiquip's proposed construction would resolve the dispute. Accordingly, pursuant to the parties' agreement, the Court construes "load step resistor" to mean "one of a group of electrical resistors in a load bank that can add or subtract a load step in an electric circuit."

F. "neglect"

Disputed Term	Multiquip's	ANA's Proposed	The Court's
	Proposed	Construction	Construction
	Construction		
"neglect" • '651 patent, claims 1, 19	an operating condition of a generator in which its load for a preset duration of time drops below a preset level at which wet stacking and soot buildup will occur	Invalid as indefinite – but in the alternative: The engine is intentionally allowed to operate in a sub optimal state for more than a short duration until wet stacking and soot build up in the exhaust system will occur.	an operating condition of a generator in which its load for a preset duration of time drops below a preset level at which wet stacking and soot buildup will occur

ANA contends that the term "neglect" is indefinite, and in the alternative, contends that "neglect" can be interpreted "as implying there has been error in the proper orientation of the [generator set]" or connoting "that the engine generator has not been cared for or not operated in the correct manner." ECF No. 36 at 23–24. Accordingly, ANA requests a construction that establishes that the engine has been intentionally operated in sub-optional conditions such that wet stacking and soot builds up in the exhaust system. In response, Multiquip contends that "neglect" has a particular meaning within the '651 patent and is not indefinite, and that its proposed construction is adopted from the teachings of the specification.

As an initial matter, the Court notes that "indefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). At this juncture, ANA has not carried its burden to establish that, based on the specification and prosecution history, the word "neglect" in claims 1 and 19 of the '651 patent

fails to inform a POSITA about the scope of the claimed invention with reasonable certainty, and thus has not shown that the term "neglect" is indefinite.

As discussed previously, claims 1 and 19 both disclose a "neglect" scenario as being one of two cases in which a generator controller either provides a control signal (claim 1) or is capable of operating a load step contactor (claim 19). The specification explains that, in certain embodiments, the generator and load bank controllers are configured to initiate the load bank when there is a "neglect scenario" or a "neglect case," as follows:

The generator controller, via the load bank controller, monitors the load connected to the generator to ensure that the load is within a "window" or "load window" bounded by pre-set lower and upper load levels. If the load connected to the generator remains at or below some pre-set load condition—i.e., below the window—for a pre-set duration, the generator controller signals the load bank controller to initiate the load bank. The load bank controller then increases or decreases the total resistance of the load bank by connecting or disconnecting load step resistors as necessary to maintain the load within window. If the load rises above the window, the steps of the load bank are disconnected as necessary. In this way, the total load on the generator—i.e., the real load and the resistance of the load bank—remains within pre-set limits. The pre-set load corresponds to a power demand on the generator that provides for optimal operation, which minimizes wet stacking and soot build up.

Restricting the load bank to operation in a neglect case allows one to save fuel because the load bank will only draw power from the generator when necessary to prevent wet stacking and soot build up. The generator will thus be allowed to operate in a sub-optimal state until such time as wet stacking and soot build up are likely to occur.

'651 patent, at 2:54–3:9.

Multiquip's proposed construction incorporates these teachings from the specification, in that "neglect" refers to "an operating condition of a generator in which its load for a preset duration of time drops below a preset level at which wet stacking and soot buildup will occur." In contrast, ANA's proposed construction introduces new ambiguities and a lack of clearly defined boundaries—*i.e.*, that the engine operates in a "sub optimal" state, for "more than a

short" duration 1—which the Court finds are unnecessary and not warranted. *See, e.g., Intell.*Ventures I LLC v. T-Mobile USA, Inc., 902 F.3d 1372, 1381 (Fed. Cir. 2018) ("'[O]ptimiz[ing]

... QoS' is a 'term of degree' that ... is 'purely subjective'").

The specification makes clear that the "sub-optimal state" contemplated in a neglect scenario are the operating conditions that would permit wet stacking and soot build up. *See, e.g.*, '651 patent, at 3:7–9. In addition, ANA proposes that neglect occurs when an engine operates in a sub-optimal state "for more than a short duration," despite the specification explaining that "[t]he load window and duration variables necessary for determining a neglect scenario will . . . be based on manufacturer or user-defined values directed at pinpointing the time when wet stacking and soot build up is likely to begin." *Id.* at 3:9–13. Rather than incorporate additional ambiguity by referring to a "short" duration—for which there is no guidance in the specification—the Court prefers the approach in Multiquip's proposed construction, which refers to a "preset duration of time."

V. CONCLUSION

The Court adopts the constructions set forth above, as summarized in the following table.

The parties are **ORDERED** not to refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are **ORDERED** to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

Term	Construction
"regeneration"	a process in which an engine doses a
• '651 patent, claims 1, 19	particulate filter with diesel fuel then ignites
-	the diesel fuel to burn off accumulated soot

¹ The inclusion of the word "intentionally" in ANA's proposed construction adds additional ambiguity, but ANA agreed during the claim construction hearing that this word could be omitted from its proposed construction.

"particulate filter"	component used to reduce particles or
• '651 patent, claims 1, 19	particulate matter from the exhaust stream of
-	an engine
"electrical communication"	a direct or indirect electrical connection
• '651 patent, claims 1, 19	
"a generator controller comprising a load	Plain and ordinary meaning
dump output and a load enable output"	
• '651 patent, claim 1	
"a load bank controller comprising a load	Plain and ordinary meaning
enable input, a load dump input, a load	
sensor"	
• '651 patent, claim 1	
"load step resistor"	one of a group of electrical resistors in a load
• '651 patent, claims 1, 3–4, 10–11, 13–	bank that can add or subtract a load step in an
14, 19, 22, 28–29, 31–32, 34–36	electric circuit
"neglect"	an operating condition of a generator in which
• '651 patent, claims 1, 19	its load for a preset duration of time drops
	below a preset level at which wet stacking
	and soot buildup will occur

SENIOR UNITED STATES DISTRICT JUDGE

SO ORDERED.

November 22, 2023.